Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-58. (Cancelled)

59. (Currently Amended) An isolated Nod-factor binding polypeptide comprising: at least 80% amino acid sequence identity to any one of SEQ ID NO: 8, 15, 31, 32, 40, or 48, ~~48,~~ wherein said polypeptide comprises an extracellular domain comprising 2 or 3 different LysM-type motifs, and wherein said polypeptide selectively binds strain-specific forms of Nod-Factor.

60. (Currently Amended) An isolated Nod-factor binding polypeptide comprising: at least 80% amino acid sequence identity to any one of SEQ ID NO: 24 or 25, ~~24, 25, 52, or 54; and~~ wherein said polypeptide comprises an extracellular domain comprising 2 or 3 different LysM-type motifs, and wherein said polypeptide selectively binds strain-specific forms of Nod-Factor.

61. (Previously Presented) The isolated Nod-factor binding polypeptide of claim 59, wherein said polypeptide comprises the amino acid sequence of any one of SEQ ID NO: 8, 15, 31, 32, 40, or 48.

62. (Currently Amended) The isolated Nod-factor binding polypeptide of claim 60, wherein said polypeptide comprises the amino acid sequence of any one of SEQ ID NO: 24 or 25. ~~24, 25, 52, or 54.~~

63. (Previously Presented) An isolated Nod-factor binding element comprising one or more isolated Nod-factor binding polypeptide of claim 59, and further comprising one or more isolated Nod-factor binding polypeptide comprising at least 80% amino acid sequence identity to any one of SEQ ID NO: 24, 25, 52, or 54; and wherein said polypeptide comprises an extracellular domain comprising 2 or 3 different LysM-type motifs, and wherein said polypeptide selectively binds strain-specific forms of Nod-Factor.

64. (Previously Presented) An isolated Nod-factor binding element comprising one or more isolated Nod-factor binding polypeptide of claim 61, and further comprising one or more polypeptide comprising the amino acid sequence of any one of SEQ ID NO: 24, 25, 52, or 54.

65. (Currently Amended) An isolated nucleic acid molecule encoding the Nod-factor binding polypeptide ~~protein~~ of claim 59.

66. (Currently Amended) An isolated nucleic acid molecule encoding the Nod-factor binding polypeptide ~~protein~~ of claim 60.

67. (Previously Presented) The isolated nucleic acid molecule of claim 65, wherein said nucleic acid molecule comprises the nucleotide sequence of SEQ ID NO: 6, 7, 11, 12, 30, 39, or 47.

68. (Currently Amended) The isolated nucleic acid molecule of claim 66, wherein said nucleic acid molecule comprises the nucleotide sequence of SEQ ID NO: 21, 22, or 23. ~~21, 22, 23, 51, or 53~~.

69. (Currently Amended) A transgenic cell stably transformed with one or more nucleic acid molecule encoding the Nod-factor binding polypeptide ~~protein~~ of claim 59.

70. (Previously Presented) The transgenic cell of claim 69, wherein said nucleic acid molecule encodes a polypeptide having the sequence of SEQ ID NOS: 8, 15, 31, 32, 40, or 48.

71. (Previously Presented) The transgenic cell of claim 69, wherein said nucleic acid molecule comprises the sequence of SEQ ID NOS: 6, 7, 11, 12, 30, 39, or 47.

72. (Currently Amended) A transgenic cell stably transformed with one or more nucleic acid molecule encoding the Nod-factor binding polypeptide ~~protein~~ of claim 60.

73. (Currently Amended) The transgenic cell of claim 72, wherein said nucleic acid molecule encodes a polypeptide having the sequence of SEQ ID NOS: 24 or 25. ~~24, 25, 52, or 54.~~

74. (Currently Amended) The transgenic cell of claim 72, wherein said nucleic acid molecule comprises the sequence of SEQ ID NOS: 21, 22, or 23 ~~, 51, or 53~~.

75. (Previously Presented) A transgenic cell comprising one or more transgene encoding the Nod Factor binding element of claim 63.

76. (Previously Presented) A transgenic cell comprising one or more transgene encoding the Nod Factor binding element of claim 64.

77. (Previously Presented) The transgenic cell of claim 69, wherein said cell is a plant cell.

78. (Previously Presented) The transgenic cell of claim 70, wherein said cell is a plant cell.

79. (Previously Presented) The transgenic cell of claim 71, wherein said cell is a plant cell.

80. (Previously Presented) The transgenic cell of claim 72, wherein said cell is a plant cell.

81. (Previously Presented) The transgenic cell of claim 73, wherein said cell is a plant cell.

82. (Previously Presented) The transgenic cell of claim 74, wherein said cell is a plant cell.

83. (Previously Presented) The transgenic cell of claim 75, wherein said cell is a plant cell.

84. (Previously Presented) The transgenic cell of claim 76, wherein said cell is a plant cell.

85. (Currently Amended) A method of producing a transgenic plant expressing a Nod-factor binding polypeptide ~~protein~~, the method comprising:

a. introducing into the plant a nucleic acid molecule encoding one or more Nod-factor binding polypeptide of claim 59, wherein the nucleic acid sequence is operably linked to a promoter; and
b. selecting transgenic plants expressing the Nod-factor binding ~~protein~~ polypeptide.

86. (Previously Presented) The method of claim 85, wherein said nucleic acid molecule encodes a polypeptide having the amino acid sequence of SEQ ID NO: 8, 15, 31, 32, 40, or 48.

87. (Previously Presented) The method of claim 85, wherein said nucleic acid molecule comprises the sequence of SEQ ID NO: 6, 7, 11, 12, 30, 39, or 47.

88. (Currently Amended) A method of producing a transgenic plant expressing a Nod-factor binding polypeptide ~~protein~~, the method comprising:

a. introducing into the plant a nucleic acid molecule encoding one or more Nod-factor binding polypeptide of claim 60, wherein the nucleic acid sequence is operably linked to a promoter; and

b. selecting transgenic plants expressing the Nod-factor binding polypeptide ~~protein~~.

89. (Currently Amended) The method of claim 88, wherein said nucleic acid molecule encodes a polypeptide having the amino acid sequence of SEQ ID NO: 24 or 25. ~~24, 25, 52, or 54.~~

90. (Currently Amended) The method of claim 88, wherein said nucleic acid molecule comprises the sequence of SEQ ID NO: 21, 22, or 23~~, 51, or 53~~.

91. (Currently Amended) The method of claim 85, further comprising introducing into the plant one or more nucleic acid molecule encoding a polypeptide having at least 80% amino acid sequence identity to SEQ ID NO: 24, 25, 52, or 54. ~~the Nod-factor polypeptide of claim 60.~~

92. (Previously Presented) The method of claim 86, comprising:

introducing into the plant one or more nucleic acid molecule encoding a polypeptide having the amino acid sequence of SEQ ID NO: 8, 15, 31, 32, 40, or 48; and further introducing into the plant one or more nucleic acid molecule encoding a polypeptide having the amino acid sequence of SEQ ID NO: 24, 25, 52, or 54.

93. (Previously Presented) The method of claim 92, comprising introducing into the plant one or more nucleic acid sequence comprising SEQ ID NO: 6, 7, 11, 12, 30, 39, or 47; and further introducing one or more nucleic acid sequence comprising SEQ ID NO: 21, 22, 23, 51, or 53.

94. (Previously Presented) The method of claim 85, wherein one or more nucleic acid sequence is introduced into the plant through a sexual cross.

95. (Previously Presented) The method of claim 88, wherein one or more nucleic acid sequence is introduced into the plant through a sexual cross.

96. (Previously Presented) The method of claim 91, wherein one or more nucleic acid sequence is introduced into the plant through a sexual cross.

97. (Previously Presented) The method of claim 93, wherein one or more nucleic acid sequence is introduced into the plant through a sexual cross.

98. (Previously Presented) A transgenic plant comprising one or more transgene encoding the Nod-factor binding polypeptide of claim 59.

99. (Previously Presented) The transgenic plant of claim 98, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 8, 15, 31, 32, 40, or 48.

100. (Previously Presented) A transgenic plant comprising one or more transgene encoding the Nod-factor binding polypeptide of claim 60.

101. (Currently Amended) The transgenic plant of claim 100, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO: 24 or 25. ~~24, 25, 52, or 54.~~

102. (Previously Presented) A transgenic plant comprising one or more transgene encoding the Nod-factor binding element of claim 63.

103. (Previously Presented) A transgenic plant comprising one or more transgene encoding the Nod-factor binding element of claim 64.

104. (Previously Presented) The transgenic plant of claim 98, wherein said plant is a cereal.

105. (Cancelled)

106. (Previously Presented) The transgenic plant of claim 100, wherein said plant is a cereal.

107. (Cancelled)

108. (Cancelled)

109. (Cancelled)

110. (Currently Amended) The transgenic plant of claim 98, wherein said plant is a ~~cereal~~ legume.

111. (Cancelled)

112. (Previously Presented) The transgenic plant of claim 100, wherein said plant is a legume.

113. (Cancelled)

114. (Cancelled)

115. (Cancelled)

116. (Previously Presented) The transgenic plant of claim 98, wherein said plant is a non-nodulating plant.

117. (Cancelled)

118. (Previously Presented) The transgenic plant of claim 100, wherein said plant is a non-nodulating plant.

119. (Cancelled)

120. (Cancelled)

121. (Cancelled)

122. (New) An isolated Nod-factor binding polypeptide comprising:
at least 90% amino acid sequence identity to SEQ ID NO: 52 or 54, wherein said polypeptide comprises an extracellular domain comprising 2 or 3 different LysM-type motifs, and wherein said polypeptide selectively binds strain-specific forms of Nod-Factor.

123. (New) An isolated nucleic acid molecule encoding the Nod-factor binding polypeptide of claim 122.

124. (New) A transgenic cell stably transformed with one or more nucleic acid molecule encoding the Nod-factor binding polypeptide of claim 122.

125. (New) The transgenic cell of claim 122, wherein said nucleic acid molecule comprises the nucleotide sequence of SEQ ID NO: 51 or 53.

126. (New) A transgenic plant comprising one or more transgene encoding the Nod-factor binding polypeptide of claim 122.

127. (New) The transgenic plant of claim 98, wherein the transgene encodes a polypeptide comprising at least 80% amino acid sequence identity to SEQ ID NO: 8.

128. (New) The transgenic plant of claim 98, wherein the transgene encodes a polypeptide comprising at least 80% amino acid sequence identity to SEQ ID NO: 15.

129. (New) The transgenic plant of claim 98, wherein the transgene encodes a polypeptide comprising at least 80% amino acid sequence identity to SEQ ID NO: 31.

130. (New) The transgenic plant of claim 98, wherein the transgene encodes a polypeptide comprising at least 80% amino acid sequence identity to SEQ ID NO: 32.

131. (New) The transgenic plant of claim 98, wherein the transgene encodes a polypeptide comprising at least 80% amino acid sequence identity to SEQ ID NO: 40.

132. (New) The transgenic plant of claim 98, wherein the transgene encodes a polypeptide comprising at least 80% amino acid sequence identity to SEQ ID NO: 48.

133. (New) The transgenic plant of claim 100, wherein the transgene encodes a polypeptide comprising at least 80% amino acid sequence identity to SEQ ID NO: 24.